DOCUMENT RESUME

ED 272 916 CS 210 016

AUTHOR	Engen-Wedin, Nancy; And Others
TITLE	Composition, Word Processing, and the Learning Disabled College Writer: An Annotated Bibliography. Supplement #1, Working Paper.
INSTITUTION	Minnesota Univ., Minneapolis. General Coll.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	[86]
NOTE	19p.; Publication of the Learning Disabled College Writers Project. For the earlier paper, see ED 267 410.
AVAILABLE FROM	Learning Disabled College Writers Project, University of Minnesota, General College, 106 Nicholson Hall, 216 Pillsbury Dr., S.E., Minneapolis, MN 55455 ($1.00 prepaid, checks only).
PUB TYPE	Reference Materials - Bibliographies (131)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Annotated Bibliographies; College Students; *Computer Assisted Instruction; *Exceptional Persons; Higher Education; *Learning Disabilities; Microcomputers; *Writing Difficulties; *Writing Instruction
IDENTIFIERS	*Learning Disabled College Writers Project

ABSTRACT

As a supplement to "Composition, Word Processing, and the Learning Disabled College Writer: An Annotated Bibliography," this bibliography contains annotations of selected recent articles that discuss how learning disabled writers in college are affected by microcomputer applications in word processing. Additional supplements to the original bibliography will be published as working papers of the Learning Disabled College Writers Project in January and August of 1987 and 1988. Materials cited number nearly 40 items, including conference papers, selections from essay collections, and articles from scholarly journals in the computer, composition, and general education fields. (SRT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED272916

Supplement #1 to

Composition, Word Processing, and the Learning Disabled College Writer: An Annotated Bibliography

Nancy Engen-Wedin
Research Associate

Julie A. Lawson
Research Assistant

Terence Collins
Project Director

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E. Hansen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Working paper of:
Learning Disabled College Writers Project
University of Minnesota
General College
106 Nicholson Hall
216 Pillsbury Drive, S.E.
Minneapolis, Minnesota 55455

Copyright: Nancy Engen-Wedin and Terence Collins

Research supported by the U.S. Department of Education, the University of Minnesota, General College, and the University of Minnesota Center for Educational Development.

CS 210 016

In this supplement to Composition, Word Processing, and the Learning Disabled College Writer: An Annotated Bibliography (January, 1986) we have selected recent articles that continue our effort to bring together and describe research studies which shed light on how learning disabled writers in college are affected by microcomputer applications in word processing. In pursuit of that goal, we also include what appear to be important articles and papers in closely related fields.

In addition to the observations that were made in the original annotated bibliography, two further generalizations can now be made:

1.) Journals published by and for learning disabilities specialists, such as The Journal of Learning Disabilities, remain the primary source of information on the characteristics of learning disabled writers and how learning disabled writers might and might not benefit from the computer in instructional settings. However, some journals outside the area of learning disabilities are also addressing the interests of non-specialists who work with learning disabled writing students. This emergent broadening of the range of inquiry promises interesting

research from a number of perspectives and for a number audiences.

2) In the January, 1986, bibliography we reported that nearly all of the information available on the impact of the computer on the writing problems of learning disabled persons had been testimonial and anecdotal. While such testimony still appears and has its own limited value, reports are beginning to appear which describe more controlled experimental studies on the subject. Such studies and the promise of future empirical research will extend what we know about the computer's advantages and limits as a tool for accomodating the writing problems of some learning disabled persons.

Additional supplements to the January, 1986 bibliography will be published as working papers of the Learning Disabled College Writers Project in January and August, 1987, and January and August, 1988.

Special thanks to Julie Lawson for her research assistance and to the University of Minnesota Center for Educational Development for supporting that assistance.

Adelman, H. S. & Taylor, L. (1985). The future of the LD field: A survey of fundamental concerns. Journal of Learning Disabilities,18(7), 422-427. (LD)

Based on a mail survey among 85 LD professionals, this article assesses the issues concerning the LD field now and in the future. Discussed are the needs for 1) improved research and theory, 2) developing valid procedures for differential diagnosis and subtyping, 3) accomodating persons whose differences and disabilities interfere with their ability to meet conventional standards, 4) broadening the current intervention activities to improve efficacy, and 5) educating all professionals who have contact with LD students.

Bridwell, L., Johnson, P., & Brehe, S. (1985). Composing and computers: Case studies of experienced writers. In A. Matsuhashi (Ed.), Writing in real time: Modelling production processes. London: Longman. (M)

This article is a more thorough discussion of the study described in Parker Johnson's "Writers Perceptions and What the Record Shows". The authors test the claim that writers produce more, revise more, and increase their creativity when they integrate word processing with their composing. Using interview, observation, and detailed, timed, computer records, the authors describe eight subjects' experiences using the word processor to compose. Also discussed in brief are related studies on 1) the effects of word processing on writers, 2) the composing process, and 3) writers retrospective accounts of composing.

Bridwell, L. Sirc, G., & Brooke, R. (in press). Revising and computing: Case studies of student writers. In S. Freedman (Ed.), The acquisition of written language: Revision and response. Norwood, New Jersey: Ablex. (M)

This paper looks critically at what the computer can and cannot do for advanced undergraduate writing students. Based on a study (second in a series) of 3-4 word processing composition sections over two years, the authors focus on how the computer affects the

revising process. Case studies of five students from an upper division composition course, "Pre-Professional Writing for the Business Major," are provided, along with a revision analysis of each student's method of adapting the computer to his/her traditional writing technique. The authors also discuss the implications of the study, specifically how word processing affects the students' revising processes of surface error, formatting, expansion of revision units, and overall written language production.

Buchanan, M. & Wolf, J. S. (1986). A comprehensive study of learning disabled adults. Journal of Learning Disabilities, 19(1), 34-38. (LD)

Based on a study of personal and educational histories and test data from 33 learning disabled adults, the authors focus on the following questions: "What characteristics of the learning disabled population which have been described in the literature persist into adulthood? What implications do these characteristics have for programming and general service delivery to learning disabled adults?" The authors conclude that many of the characteristics described in the literature that exist in childhhood also seem to persist into adulthood. Significant differences in both ability and achievement between male and female learning disabled adults are discussed. Problems areas identified by the subjects include: low motivation, distractibility, self concept problems, emotional liability, and lack of organization. Two vignettes are provided.

Burger, K. (1986). Computer-assisted instruction: Learning style and academic achievement. Journal of Computer-Based Instruction, 12(1), 21-22. (M)

A non-random convenience sample of 81 of 291 undergraduate students in a medical terminology course using computer-assisted instruction (CAI) was studied to test the correlation between three variables (learning style, preference for CAI, and academic achievement) and a positive learning experience for the students. The author found insignificant correlations between CAI preference and learning style, and academic achievement and learning style. There was a small but statistically significant correlation between CAI preference and academic achievement. The author concludes that as the computer

is becoming an integral part of the educational system, educators must be aware of CAI's full capabilities and potentials. In light of earlier research, the author feels that learning styles warrant further study in order to determine the benefits to the student when a particular style is matched with an appropriate CAI method.

Cohen, J. (1985). Learning disabilities and adolescence: Developmental considerations. In S. C. Feinstein (Ed.), Adolescent psychiatry: Developmental and clinical studies (vol 12, pp. 177 -195). Chicago: University of Chicago. (LD)

The author provides an analysis of the psychological processes that inhibit the learning process and ego functioning in learning disabled high school and college students. Two problems that exist for the learning disabled adolescent are: 1) the problem that is associated to the cognitive disability itself, and 2) "problems owing to the psychological factors that are directly or indirectly related to being learning disabled". Further discussion is provided with paragraph titles such as: The Experience of Self; The Experience and Expectations of Others; Learning Disabilities and Cumulative Trauma; Learning Disabilities as an Organizer of Development; Learning Disabilities, the Dompensatory Process, and Adaptation; and Rigidity.

Collins, T. (1985). Introducing word processing to learning disabled college writers. Paper presented at the Annual CCCC Conference in New Orleans, LA, in March, 1986. (LD & M & C)

The author provides a brief description of the foundations and goals of the Learning Disabled College Writers Project at the University of Minnesota, General College. Also included are 1) an outline of the possible benefits of word processing use for learning disabled students, 2) suggestions for training students to use Apple IIe or Macintosh word processing software, 3) three writing samples by learning disabled college students, 4) a training guide designed to teach students the basic foundations, concepts and skills of MacWrite word processing software for the Macintosh, and 5) an in-depth interview with a learning disabled student concerning her experiences using Macintosh word processing for composition.

Collins, T. & Price, L. (1986b). Testimony from learning disabled college writers on the efficacy of word processing in their writing process. Minneapolis, MN: University of Minnesota, General College (ERIC Resources in Education Clearinghouse No. CF 209594) (M & LD & C)

The authors describe the purpose of the Learning Disabled College Writers Project as an effort to better understand the writing processes of learning disabled college students. Through the use of technology, they create a curriculum which will help mainstream these students, providing a more positive and successful educational experience. Noting the current lack of empirical research validating the positive effects of integrating word processing with composition, the authors present eight student testimonials. The purpose of these testimonials is to provide "uninterpreted insight" into both the positive and inhibitive aspects of microcomputer word processing when used to accomodate students' learning disabilities.

Collins, T. & Price, L. (in press). Microcomputers and the learning disabled college writer. Collegiate Microcomputer, 5(1). (M & LD & C)

This paper was initially presented at the Microcomputers and Basic Skills Conference held in New York City in November of 1985, and will be published in a special issue of Collegiate Microcomputer that is devoted to papers presented at that conference. The article begins by describing the variety of deficits that are commonly observed in the writing of learning disabled college students, as well as mapping some clear patterns that emerge when accomodating learning disabled college writers through the use of the microcomputer and word processing applications. Other topics covered include: 1) software selection, and 2) training students to use the word processor. Further research is recommended by the authors.

Collins, T. & Price, L. (in press). Micros for LD College Writers: Rewriting the documentation for word processing programs. LD Focus. (M & LD & C)

It has been shown that word processors and word processing software are effective accomodations for some learning disabled

college writers. This article discusses the problems that accompany the documentation of microcomputer word processing software, in the areas of readability and accessibility of the instructional materials. Numerous guidelines for revision of the documentation are provided, including some sample revisions. The authors conclude by suggesting the need for additional empirical research to answer questions such as: "Which hardware and software configurations are cost effective?...What general instructional principles can be validated as effective in training learning disabled students in the use of word processing and what mediums are best suited for such training (i.e. written instructions, audiotape, videotape, face-to-face tutorial, large group live instruction)?"

Collins, T. & Price, L. (in press). A guide to selecting word-processing software for learning disabled college writers. Computer-Assisted Composition Journal. (M & LD & C)

Although the demand for using word processing applications of microcomputers to help learning disabled students is on the rise, such use of word processing software may not actually meet the specific needs of learning disabled students. Instructors and specialists need to review software products and microcomputer applications in view of these needs. The authors outline the typical configuration of needs for learning disabled college writers and provide selection criteria for word processing software. The authors share their list of characteristics to look for in the documentation of software and related products: 1) the language used in the tutorials should be free of needless jargon and technical language, 2) given the limited attention and comprehension of learning disabled users, the amount of information that the reader is expected to take in should be presented in short and discrete sections, and should concern only a very few related operations, 3) assess each documentation or tutorial for the degree of familiarity that is assumed with particular hardware systems, 4) check for on-screen working features such as the 40 or 80 column display or scrolling option, and 5) check the word processors' use of multisensory approaches, i.e. blinking menu bars, warning beeps, or icons. The authors also attach a screening checklist to be used when evaluating new word processing software.

Cruikshank, W. M., Morse, W. C., & Johns, J. S. (1980). The enormity of it all. In W. M. Cruikshank, W. C. Morse, & J. S. Johns (Eds.), Learning disabilities: The struggle from adolescence toward adulthood (pp. 3 - 9). Syracuse, New York: Syracruse University Press. (LD)

This chapter introduces the complexity of the issue of learning disabilities. The authors discuss the two major types of learning disabilities, those which are environmentally produced (not related specifically to any nervous system dysfunction), and disabilities related to perceptual, perceptual motor, and cognitive deviance.

Gagne, R. M. (1974). Educational technology and the learning process. Educational Researcher, (3), 3-8. (M)

The author addresses the question of how educational technology can be employed to promote learning. Included is a preliminary discussion of learning as it occurs in an educational setting, specifically the stages of the learning process and learning outcomes. Based on this discussion the author provides implications for supportive instruction using media, books, television programs, and the computer.

Gerber, P. (1986). Learning disabled adult nexus: Emerging American issues and European perspectives. Journal of Learning Disabilities, 19 (1), 2-4. (LD)

Dutch and Danish services for the learning disabled are discussed as comparative models for services in the United States. The author addresses the issue of U.S. policy-making with respect to the degree of societal obligation necessary to implement beneficial services to learning disabled persons.

Isenberg, R. S. (1985). Computer-aided instruction and the mainstreamed learning disabled student. Journal of Learning Disabilities, 18, (9), 557-558. (LD & C)

This article discusses the use of computer-aided instruction (CAI) within the mainstreamed LD student classroom. The author also addresses the need to integrate cooperative group structures with CAI. The use of cooperative groups has been shown to result in a higher level

of achievement than the competitive or individualistic methods of CAI.

Johnson, P. & Bridwell, L. (1982, December). Writer's perceptions and what the record shows. Paper presented at the 1982 Annual Meeting of Modern Language Association, Los Angeles, December, 1982. (M)

Based on a study of the writing methods of eight graduate student composition teachers, this article describes the writers' use of word processors relative to the types of pedagogical intervention that might be effective. Two case studies are presented discussing the methods by which the subjects adapted the word processor to their traditional composing processes (pen and paper, typewriter). The authors also discuss the need for more research in this area, to provide further insight into both the composing process itself and how various composition methods can be integrated with word processing.

Johnson, D. W. & Johnson, R. T. (1986). Computer-assisted cooperative learning. Educational Technology, 26(1), 12-18. (M & C)

In this article the authors discuss the importance of a cooperative learning environment when using computer-assisted instruction. They argue that the traditional mode of computer-assisted learning is limiting to the student because it focuses primarily on the student-computer interaction. This individualistic assumption is negative for the student in that it 1) denies oral summary and explanation, 2) denies social models for imitation and comparison, and 3) does not allow for feedback which is as complex and complete as peer interaction. They feel computer-assisted cooperative learning creates a positive interdependence among students' goal attainments, and regardless of differences in ability, background, and sex, promotes greater self-esteem, psychological health, and collaborative skills. The authors found that the data over the past years shows students prefer to work cooperatively on the computer. They propose cooperative models for three types of computer-assisted learning tasks: drill and practice, simulation, and word processing.

Kolich, E. M. (1985). Microcomputer technology with the learning disabled: A review of the literature. Journal of Learning Disabilities, 17(7), 428-431. (L & C)

The author provides a general overview of microcomputer application. Also discussed are recommendations for selecting courseware and some specific applications for the learning disabled student.

Larson, B. L. & Roberts, B. B. (1986). The computer as a catalyst for mutual support and empowerment among learning disabled students. Journal of Learning Disabilites, 19, (1), 52-55. (M & C)

This study examines the use of the computer to facilitate the development of supportive social skills and esteem in learning disabled high school students. The experimental group was comprised of five learning disabled students in a high school resource room. An instructor (the first author) was present in the classroom to act as a facilitator, rather than teacher, in an activity involving LOGO computer language. Questionnaires focusing on percieved levels of social support were administered to the participants and to a control group of learning disabled students who did not participate in the activity. The activity of the students was tape recorded so that evaluators not associated with the project could rate the levels of social support that ocurred. The authors found that for students who have learning difficulties the computer environment provides the opportunity to learn and share skills, benefiting these students in the area of self esteem, and carrying over into social needs.

MacArthur, C. A. & Shneiderman, B. (1986). Learning disabled students' difficulties in learning to use a word processor: Implications for instruction and software evaluation. Journal of Learning Disabilties, 19(4), 248-253. (M & C)

Based on a study of student error while using the microcomputer, this article provides recommendations for software evaluation and instruction. The authors also discuss the impact that microcomputers have on students' attitudes toward writing. Some of the observed results were: 1) increased eagerness to write, 2) ability to write more continuously, 3) an increase in the length of the piece, and 4) although students still did not spontaneously revise their work, they became more willing to revise with adult supervision.

McGrady, H. J. (1985). Administrative support for mainstreaming learning disabled students. Journal of Learning Disabilities, 18(8), 464-466. (LD)

This article focuses on the PAC (Parallel Alternate Curriculum) Program in the Mesa school district of metropolitan Phoenix. Rather than placing students with learning disabilities in special resource rooms, PAC focusses on changing teaching behavior in order to maintain these students within the mainstream. The author discusses the genesis of the program, the operation and continued success of the first project, and the ingredients of and necessity for strong administrative support.

Miller, S. R. (1981). A crisis in appropriate education: The dearth of data on programs for secondary handicapped adolescents. The Journal of Special Education, 15(3), 351-360. (LD)

In order to establish the boundaries of knowledge on secondary handicapped students, the author provides a review of the literature and research addressing the following issues: 1) achievement motivation, 2) labeling, 3) memory and information retrieval, 4) moral development, and 5) cognitive development and integration. The author also discusses the difficulty arising from the lack of data in these areas, especially with respect to the needs of secondary handicapped youth and the strategies for "serviceable instructional alternatives". As a result the needs of handicapped youth are not reflected in assessment, placement, programming, and instructional services.

Morocco, C. C. & Newman, S. B. (1986, April). Word processors and the acquisition of writing strategies. Journal of Learning Disabilities, 19(4), 243-247. (M & C)

The public nature of the computer (versus the "private" method of pencil and paper) creates an accessibility which enables teachers to help learning disabled children with the writing process. This article describes typical writing problems of learning disabled children, and how the computer can make these problems more accessible to the teacher's help. The authors also discuss difficulties that may arise from accessibility.

Nash, J. & Schwartz, L. (1985). Making computers work in the writing class. Educational Technology, 25(5), 19-26. (M)

Based on the belief that computers are an important tool for teaching composition, the authors provide their recommendations for integrating computers into the classroom. The following are discussed: 1) pre requisite skills for use of the computers; 2) how to deal with the first orientation session; 3) teaching revision; 4) computer literacy; 5) choosing hardware; 6) choosing and adapting word processing software; and 7) setting up the computer lab.

Nayman, R. (1982). College learning assistance services and the learning disabled college student. In M.R. Schmidt & H.Z. Sprandel (Eds.). New Directions for Student Services: Helping the Learning Disabled Student (no. 18, pp. 69 - 85). San Francisco: Jossey Bass. (LD)

The author discusses the necessity of services for the learning disabled student pursuing a post-secondary education. Also provided are typical characteristics of general, visual, and auditory learning disabilities, along with a description of the instructional interventions (remediation and accomodation) recommended for each.

Norton, P. (1983). Computer potentials and computer educators: A proactive view of computer education. Educational Technology, 23(10), 16-19. (M & C)

The educational system must adjust to meet the needs of those who must learn to survive in the new information environment. In this article the author discusses a proactive (versus reactive) approach to computer integration in the classroom. The proactive view is based on the following three stages: 1) New technology follows the lines of least resistance. 2) Technology is used to improve previous technology. 3) New directions and uses grow out of the technology itself. In addressing stage 3, computers can be used as a means for expanding the human mind. The final section of the article focuses on the principles, practices, and computer-related skills of the computer educator. The author also provides four administrative strategies for implementing computer education in the schools.

Parker, F. (1985). Dyslexia: An overview. Journal of Basic Writing, 4(12), 58-67. (LD & M)

Based on the definition "a specific reading disorder" (i.e. occuring in the absence of other deficiencies such as sensory deficit, brain damage, emotional disorder, instructional or socioeconomic disadvantage) the author provides an overview of the characteristics and the four traditional theories of dyslexia: 1) the visual deficit theory, 2) the intersensory deficit theory, 3) serial order perception theory, and 4) the linguistic processing deficit theory. The author also provides five examples of linguistic information which illustrate the type of remediation most beneficial to the reading disabled individual.

Pianko, S. (no date). A description of the composing processes of college freshman writers. Research in the Teaching of English, 5-21. (M)

The author discusses the implications that arise from observing similarities and differences in compositional behavior (methods of prewriting, planning, composing, rereading, stopping, contemplating and handing in the finished product). The article is based on a study of 24 composition students grouped into six categories: 1) traditional class status, 2) remedial status, 3) typical college age, 4) age >21, 5) male, and 6) female.

Richards, A. (1985). College composition: Recognizing the learning disabled writer. Journal of Basic Writing, 4(12), 68-78. (M & C)

Based on a study of thirty students with atypical writing behaviors, the author presents a guideline for contrasting writing errors characteristic of inexperienced writers with those characteristic of writing disabled students. While inexperienced writers commit errors with discernable patterns, the learning disabled students' compositions will contain errors which are often based on no comprehensible rationale. The purpose of comparison is to eliminate the traditional strategy of composition instructors who use remediation in response to any writing dysfunction. The author discusses alternative interventions for the learning disabled writer including: self-monitoring of error, free writing, and teaching a more highly structured approach to organization and development.

Rothe, P. J. (1983). Critical evaluation of educational software from a social perspective: Uncovering some hidden assumptions. Educational Technology, 23(9), 9-14. (M)

This study focuses on the definition of educational technology as the use of materials, energy sources, tools, and systems for achieving educational goals. The author discusses some assumptions underlying computer software within the categories of 1) language usage, 2) knowledge, 3) ideology, 4) profit, 5) culture, and 6) ethics.

Ryan, W.C. (1986). Proceedings of the National Educational Computing Conference '86 in San Diego, CA, June, 1986.

To be used as a reference for advancing the use of computers at all educational levels, this collection presents a series of reviewed papers, tutorials, panels, and special sessions given by individuals with expertise in the computing and education fields.

Sanchez, S. (1984). Where do we go from here: A look to the future in rehabilitation of learning disabled individuals. Journal of Rehabilitation, 50(2), 82-88. (LD & CA)

Program and research initiatives in the past have attempted to expand and encourage vocational rehabilitation services to individuals with learning disabilities. The problems relating to the definitions and reporting codes of "learning disability" and the severity of specific handicaps continue to affect the eligibility and the provision of services to individuals considered to be learning disabled. The author discusses the recent activities of the RSA (Rehabilitation Services Administration) Task Force on Learning Disabilities to analyze these issues, and offers short and long term alternatives in the areas of program guidance and future initiatives.

Scandura, J. M. (1983). Three roles for the computer in education. Educational Technology, 23(9), 15-16. (M)

This article briefly discusses the three major roles of the computer in education: 1) to learn about the effects of computers, 2) to learn about computers themselves, and 3) using computers to promote

learning computer-based instruction. The author describes the three methods of CAI (drill and practice, tutorial, simulation) and respective applications.

Schwartz, L. (1983). Teaching writing in the age of the word processor and personal computers. Educational Technology, 23(6), 33-35. (M)

The author discusses the change in student approach to error as a result of using electronic (IBM 75) typewriters with text editing functions. Also discussed is the author's research into the LOGO computer language and the benefits of using computers as interactive tools. The computer can be a means to learn about learning: "In teaching the computer how to think, children embark on an exploration about how they themselves think . . . ."

Short, E., Feagan, L., McKinney, J. D., & Applebaum, M. (1985). Longitudinal stability of LD subtypes based on age-and IQ-achievement discrepancies. (LD)

Motivated by the problems arising from the existing definitional imperfection of learning disability, this study employed a two-fold classification system in order to place children into educationally meaningful groups. The first study concentrates on the classification of LD and normal students by considering the separate and simultaneous effects of IQ- and age-achievement discrepancies. The second study addresses the stability of the classification (i.e. whether the resulting classification was beneficial to the students over time).

Smith, M. W. (1984). Theory and research. In M. W. Smith (Ed.), Reducing writing apprehension (pp. 1-8). Urbana, Illinois: ERIC Clearinghouse on Reading and Communication Skills. (M)

This article discusses the correlations between levels of writing apprehension and the development of writing skills. Smith asserts that the higher the level of writing apprehension, the more apt the student is to avoid the writing task, resulting in a lower level of compositional skill. He feels that more research is needed in the area of cause of apprehension. Also discussed are three experimental

procedures (Bloom, 1979; Fox, 1980; Thompson, 1979) in reducing writing apprehension.

Solomon, G. & Gardner, H. (1986). The computer as educator: Lessons from television research. Educational Researcher, 15(1), 13-18. (M)

There are distinct differences in purpose and scope between television and computers, yet useful lessons can be drawn for the computer from assumptions underlying television learning. In this article the authors propose the following for the computer researcher: 1) avoid asking whether computers teach better than other mediums; 2) approach the research in an open-ended, holistic way; 3) realize that learners bring active learning strategies to encounters with new mediums or technologies; and 4) expect a variety of outcomes.

Swanson, H. L. & Obrzut, J. E. (1985). Learning disabled readers' recall as a function of distinctive encoding, hemisphere processing and selective attention. Journal of Learning Disabilities,18(7), 409-417. (LD)

Addressing the assumption that learning disabled children have limited word knowledge structures that influence their hemispheric processing, this study compared learning disabled and non learning disabled readers on dichotic listening recall tasks that included semantic (i.e. red, green), phonemic (i.e. mit, pit, hit), and structural orienting (sun, same, seal, soft) word list presentations. The authors make several assumptions. First, the type of orienting task influences the "recall performance by controlling the distinctivenes of the memory trace". Second, when orienting tasks fail, ability group differences may be attributed to deficiencies in word knowledge, especially when the task draws attention to distinctive word features. The third assumption had to do with assessing the organization of information in long term memory. The authors examined the clustering of target words (even though this is generally assumed to measure organization at input), in order to determine the ability group difference at in the organization of word knowledge in long term memory. The dependent measures in this study were degree of laterlization, free recall, clustering, and selective attention. "Recall increases were found to be a function of (ability) group, use of orienting instructions, and level of word processing. The

authors also found that "group recall differences interact with orienting instructions" and that "ability group differences in dichotic listening were attributed to word knowledge (ability to activate word features congruent with the orienting task) rather than differences in hemispheric capacity or selective attention, per se."